

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §.116, and in light of the remarks which follow, are respectfully requested.

As correctly noted in the Office Action Summary, Claims 1-21 are pending in the application and are under consideration.

At the outset, the Applicants' representative thanks Examiner Moore for her time and courteous interview conducted on January 4, 2001. The Interview Summary accurately reflects the substance of the interview.

By the above amendments, Claim 20 has been revised in response to the 35 U.S.C. §112, second paragraph, rejection which is further addressed below.

Turning to the Official Action, Claim 20 stands rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth at page 2 of the Official Action. This rejection has been obviated by the above revision to Claim 20 to more particularly point out the formation of functionalized silicone oils by utilizing the claimed heterogeneous catalytic composition. The claim as written is believed to be in full compliance with 37 C.F.R. §1.112 and withdrawal of this rejection is respectfully requested.

Claims 1, 3, 9, 11 and 20 stand rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over *Jachmann et al* (U.S. Patent No. 5,187,251); Claims 2, 9, 10, 12, 18, 19 and 21 stand rejected under §103(a) as

being obvious over *Jachmann et al*; and Claims 13-17 stand rejected under §102(b) as being anticipated by *Jachmann et al*. These rejections are traversed for the following reasons.

The present invention relates to a novel process for the preparation of functionalized silicone oils having at least one hydrocarbon-containing ring in which is included an oxygen atom. In particular, the subject matter of the present invention relates to a process for hydrosilylation between polyorganohydrosiloxanes and unsaturated units including at least one hydrocarbon-containing ring having an oxygen atom. Some of the advantages associated with the claimed process include the formation of a polyorganosiloxane having a stable viscosity and being non-turbid.

Independent Claim 1 sets forth a process for the preparation of a nonturbid functionalized silicone oil of stable viscosity by hydrosilylation of a polyorganohydrosiloxane with synthons. The synthons hydrosilylated with the polyorganohydrosiloxane are different or identical, including at least one hydrocarbon-comprising ring in which is included at least one oxygen atom. The hydrosilylation reaction is carried out in the presence of a heterogeneous catalytic composition including a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide. The polyorganohydrosiloxane is linear or cyclic.

Jachmann et al relates to curable organopolysiloxanes having epoxy groups. In particular, *Jachmann et al* relates to a method for synthesizing curable organopolysiloxanes having epoxy groups and to the use thereof as curable coating materials with adhesive properties as casting materials, and as coating materials for glass fibers. Column 1, lines 8-15.

Plaintiff's
Response

As discussed during the interview, *Jachmann et al* fails to disclose or suggest each feature of the claimed invention. For example, *Jachmann et al* does not disclose hydrosilylating the synthons with the polyorganohydrosiloxane containing only SiH groups, as in the present invention. In this regard, *Jachmann et al* states:

The introduction of the $-R_3OH$ group accordingly is accomplished by an addition reaction between appropriate alcohols with a terminal olefinic double bond and an organopolysiloxane having epoxy groups and, additionally, SiH groups.

Column 8, lines 56-60. Thus, the polyorganohydrosiloxane synthesized by *Jachmann et al* contains both SiH and epoxy groups, while the polyorganohydrosiloxane of the present invention contains only SiH groups.

Further, the Examiner has relied on Example 1 of *Jachmann et al* for the proposition that polyorganohydrosiloxane employed therein meets formula (XVI) of the claimed process. Official Action at page 3. This is not the case. The polydimethylsiloxane that is employed in the hydrosilylation of *Jachmann et al* includes R_3OH and epoxy groups. In particular, the polydimethylsiloxane of *Jachmann et al* utilized in the

hydrosilylation is first reacted with allyl alcohol ($=R_5OH$) and vinylcyclohexane in the presence of $H_2PtCl_6 \cdot 6H_2O$. Therefore, the allyl alcohol provides the R_3OH groups and the vinylcyclohexane provides the epoxy groups. Thus, clearly the polyorganohydrosiloxane utilized in the hydrosilylation of *Jachmann et al* is different from the one of the present invention.

Furthermore, as discussed during the interview, and as shown in the attached Declaration Pursuant to 37 C.F.R. §1.132, the experiments conducted demonstrate that the polyorganohydrosiloxane of the present invention is different from the starting materials of *Jachmann et al* and, due to this difference, the hydrosilation reaction of the present invention leads to the production of a silicone that has a stable viscosity and low turbidity.


Accordingly, for at least the foregoing reasons, withdrawal of these rejections is in order.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at his earliest convenience.

Respectfully submitted,

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Attachment to Reply and Amendment Pursuant to 37 C.F.R. §1.116
dated March 13, 2001

Marked-up Claims 1, 2, 13-17 and 20.

20. (Three times Amended) A process for the preparation of functionalized silicone oils which are stable and nonturbid, comprising providing a heterogeneous catalytic composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support being selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide and forming functionalized silicone oils.